

REMARKS/ARGUMENT

Claims 1 through 17 are pending. All of the claims are independent except for claim 9.

Applicant declines at this time to amend the abstract, in view of the fact that no objection to the abstract was set forth in the Office Action.

The Office Action did not include an initialed copy of the form PTO-1449 filed with the Information Disclosure Statement dated April 21, 2000. A duplicate copy of that paper is submitted herewith for the Examiner's convenience. It is requested that the form be initialed by the Examiner and returned with the next Office Action.

Claim 7 was rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 4,261,051 ("Ohnushi"). Claim 10 was rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,307,868 ("Rakib"). Claims 1 through 6, and 11 through 16, were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,974,041 ("Kornfeld") in view of Rakib. Claims 8, 9 and 17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kornfeld in view of U.S. Patent No. 6,054,894 ("Wright") and further in view of Rakib.

In view of the remarks set forth below, the Applicant requests reconsideration of the Examiner's rejections.

Initially, Applicant takes strong issue with the statement made at page 2 of the Office Action that the arguments presented in the Amendment dated February 4, 2003 somehow fail to comply with 37 C.F.R. 1.111(b) because, it was alleged, they amounted to a general allegation that the claims define patentable subject matter. This is not correct.

In that Amendment, Applicant pointed out with particularity which recited features

were not believed by Applicant to be taught or suggested in the cited references, and thus met the requirements of 37 C.F.R. 1.111(b). Even if the Examiner disagrees with the points made in that response, the response was no less proper. The Examiner's opinion of the technical *correctness* of Applicant's arguments has no bearing whatsoever upon whether 37 C.F.R. 1.111(b) has been complied with.

I. Rejection of Claim 7

In the Office Action, claim 7 was rejected under Section 102(e) as being anticipated by Ohnushi. Onushi, however, fails to disclose each and every limitation of claim 7.

In the Office Action, the position was taken that the fact that the arguments presented in the previous response relied upon the fact that the circuit of claim 7 does not require the use of a multiplier. However, it was made very clear that an explicitly recited feature was not taught by Onushi. In particular, Onushi does not disclose the recited feature "a plurality of bit shifters that shift input baseband signals to the right by different certain bit."

Instead, Onushi discloses a level adjustment circuit formed using a conventional multiplier unit comprising *a single shift register*, two latches, an adder, three AND gates, and an OR gate. By contrast, the level adjusting circuit of claim 7 requires "a plurality of bit shifters that shift input baseband signals to the right by different certain bits" and "a plurality of switches for selecting outputs from said respective bit shifters in accordance with a gain desired to be set." By virtue of the recited structure, the level adjustment circuit of claim 7 may advantageously be formed without the need for a multiplier. This provides for a lower power consumption than the conventional multiplier-based level adjustment disclosed by Onushi. As a result, Onushi does not anticipate claim 7 of the present invention, and the rejection of claim 7 under Section 102 should be withdrawn.

II. Rejection of Claim 10

In paragraph 6 of the Office Action, claim 10 was rejected under Section 102(e) as being anticipated by Rakib. However, as was pointed out in the previous response, Rakib fails to disclose or suggest each and every limitation of claim 10. For example, claim 10 requires “calculating a gain set value with which an amplitude value of a multiplexed baseband signal matches a dynamic range in D/A conversion based on the number of transmission codes which is the number of multiplexed baseband signals.” Rakib does not disclose or suggest this limitation. Rather, in Rakib, a scalar amplifier 564 scales the amplitude level of the digital numbers in accordance with a signal which indicates how many timeslots are currently in use by the modem. In other words, in contrast to claim 10 which requires calculating a gain set value based on “the number of transmission codes which is the number of multiplexed baseband signals,” Rakib discloses adjusting amplitude levels based on the number of timeslots in use by the modem.

With regard to the “Response to Arguments” at page two of the Office Action, the Rakib system uses a combination of CDMA and TDMA techniques such that the signals spread with different codes are transmitted *at different times*, instead of using different basebands, as in multicode systems. Thus, Rakib does not teach multiplexing a plurality of baseband signals spread with different spread codes *into one baseband signal*. The signals that are multiplexed in Rakib’s Fig. 32, are the real and imaginary components (I and Q). It follows from this, that there is no teaching of adjusting the amplitude value *of the code-multiplexed baseband signal*, as that term is defined in the claim, prior to the D/A conversion.

Also, even if it were deemed true, for the purpose of argument, that the signal output by the scalar amplifier of Rakib is varied on the basis of something that may be viewed as *analogous* to the recited number of multiplexed baseband signals, the Examiner still has not set forth a prima facie case of anticipation of claim 10. To support an anticipation rejection requires that identical structure or steps, as recited in the claim, be explicitly or inherently

taught in a single reference. This test has not been met in this case for at least the above reasons and thus no prima facie case of anticipation has been set forth in the Office Action. Moreover, no teaching has been found that would have provided motivation to one of ordinary skill in the art to change the principle of operation of Rakib from the combined CDMA/TDMA operation to one using a multicode format, along the lines of the claimed invention.

Thus, Rakib does not anticipate claim 10, and the rejection of this claim under Section 102(e) should be withdrawn.

III. Rejection of Claims 1-6 and 11-16 Under Section 103

In the Office Action, claims 1-6 and 11-16 were rejected under Section 103(a) as being obvious over Kornfeld in view of Rakib. The Applicant respectfully traverses this rejection, and requests that it be withdrawn.

Each of claims 1 through 6 and 11 through 16 includes a limitation that requires that the amplitude value of a signal be adjusted “to an amplitude value matching a dynamic range of said D/A converting means based on the number of transmission codes which is the number of multiplexed baseband signals.” In the Office Action, it is conceded that Kornfeld does not disclose this limitation. To remedy this deficiency in Kornfeld, the Office Action cites Rakib.

However, as was discussed in section II above, in connection with the rejection of claim 10, Rakib also fails to teach or suggest the adjustment of amplitude values “based on the number of transmission codes which is the number of multiplexed baseband signals.”

Thus, Kornfeld and Rakib, either individually or in combination, fail to teach or

suggest every feature of claims 1 through 6 and 11 through 16. As a result, the Office Action has failed to establish a prima facie case of obviousness with respect to these claims.

Moreover, even if Rakib is deemed, *arguendo*, to teach everything for which it was relied upon, there would have been no motivation whatsoever to have modified Kornfeld to use Rakib's scaler to vary the signal inputted into the D/A converters of Kornfeld. In Kornfeld, individual D/A converters (DAC's 270 and 272 in Fig. 7) are provided, *one at each output of the respective baseband filters 264 and 266*. Thus, one of ordinary skill in the art would have found no reason to perform the recited level adjusting. That is, in a system having individual D/A converters, each D/A converter can simply be chosen appropriate to the level of input signal it will encounter. Because each baseband filter output supplies its output to its own D/A converter, there is no need in Kornfeld for the amplitude value of that signal to be adjusted to an amplitude value matching a dynamic range of the D/A converter based on the number of transmission codes, i.e., the number of multiplexed baseband signals.

It is not enough that it would have been *possible* to modify a primary reference so as to meet claim features. There must be some teaching in the prior art that would have motivated a person of ordinary skill in the art to actually make the modification. Since the structure of Kornfeld makes the proposed modification completely unnecessary, there would have been no such motivation.

Further, there would be no need to vary any hypothetical amplitude adjustment on the basis of *the number of baseband signals*. In Kornfeld, unlike in multicode transmitters, there are always just two signals (corresponding to the real and imaginary communication channels I and Q).

In view of the above, there would have been no motivation to modify Kornfeld to add an amplitude adjusting feature, still less one that is dependent on the number of baseband signals, as is claimed, at least because the addition of such a feature is totally unnecessary. It is

submitted that the only motivation to make such a modification is to meet the recited features of the claims, which is, of course, a completely improper motivation.

Accordingly, no prima facie case of obviousness has been set forth in the Office Action and withdrawal of the rejection is respectfully requested. If the Examiner intends to repeat the rejection based upon Kornfeld as applied in this Office Action, it is requested that the Examiner submit an affidavit explaining, in appropriate technical detail, exactly why one of ordinary skill in the art would have been motivated to make the modification to Kornfeld proposed in the Office Action.

IV. Rejection of claims 8, 9, and 17

In the Office Action, claims 8, 9, and 17 were rejected over Kornfeld in view of Wright and further in view of Rakib.

Each of claims 8, 9, and 17 includes a limitation that requires that the amplitude value of a signal be adjusted “to an amplitude value matching a dynamic range of said D/A converting means based on the number of transmission codes which is the number of multiplexed baseband signals.” However, as discussed above, there would have been no motivation to modify Kornfeld to include the above-mentioned adjustment. For at least this reason, the Office Action fails to set forth a prima facie case of obviousness.

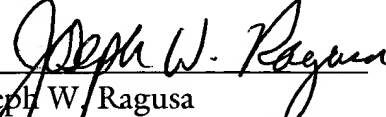
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In view of the foregoing remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

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Respectfully submitted,

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